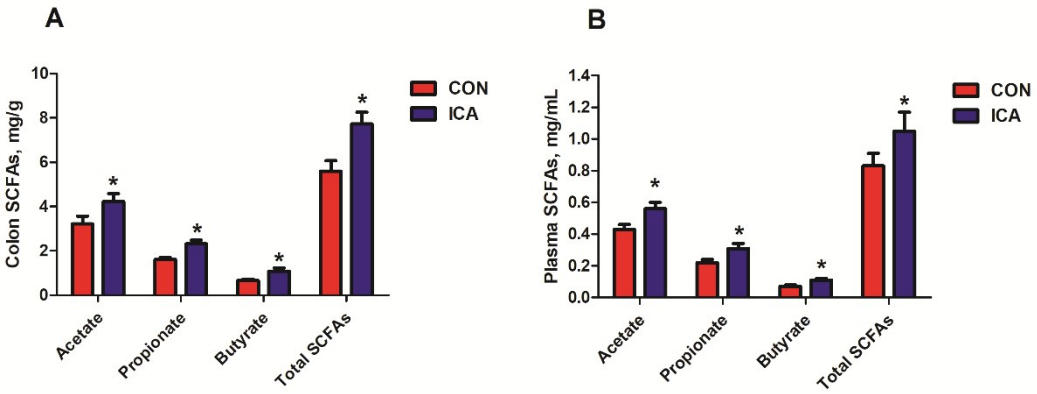
Electronic Supplementary Material (ESI) for RSC Advances.

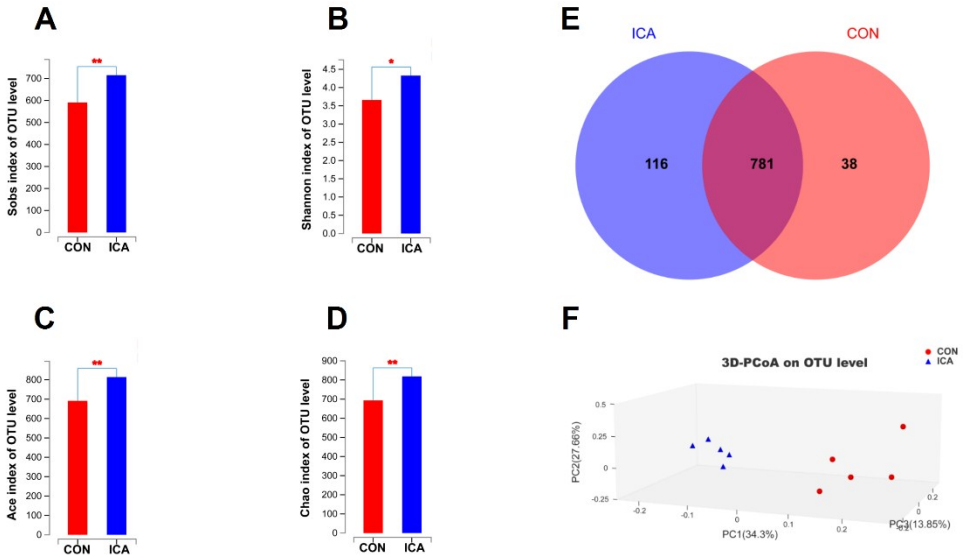
Table S1 Primer sequences used for reverse-transcription quantitative real-time PCR

Target genes	Prime forward/reverse	Primer sequence (5'→3')
GAPDH	Forward	CGTCCCTGAGACACGATGGT
	Reverse	GCCTTGACTGTGCCGTGGAAT
TLR4	Forward	TCAGTTCTCACCTTCCTCCTG
	Reverse	GTTCATTCCTCACCCAGTCTTC
MyD88	Forward	GATGGTAGCGGTTGTCTCTGAT
	Reverse	GATGCTGGGGAACTCTTTCTTC
NF-κB	Forward	AGTACCCTGAGGCTATAACTCGC
	Reverse	TCCGCAATGGAGGAGAAGTC
ZO-1	Forward	GCCATCCACTCCTGCCTAT
	Reverse	CGGGACCTGCTCATAACTTC
Occludin	Forward	CAGCAGCAGTGGTAACTTGG
	Reverse	CAGCAGCAGTGGTAACTTGG
Claudin-1	Forward	AAGGACAAAACCGTGTGGGA
	Reverse	CTCTCCCCACATTCGAGATGATT

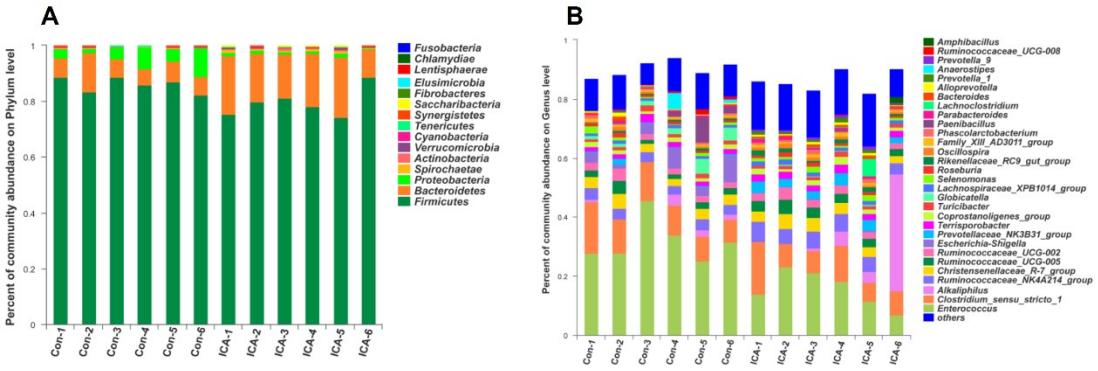
Supplemental figure 1: Effect of diet supplement with ICA on plasma and colonic digesta SCFAs in weaned piglets. (A) Colonic SCFAs concentrations. (B) Plasma SCFAs concentrations. Data were shown as mean ± SEM (n = 6). *, $P < 0.05$.



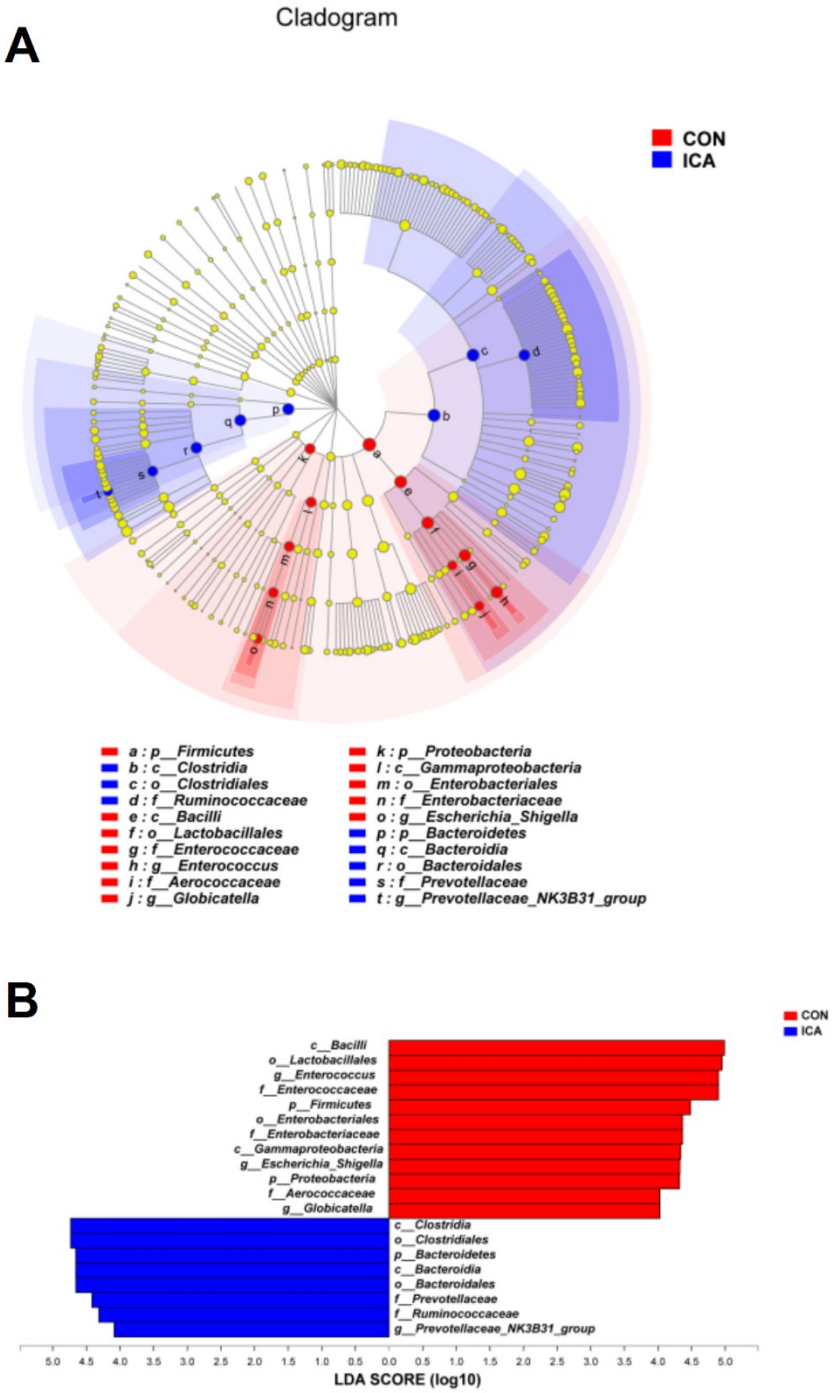
Supplemental figure 2: Effect of diet supplement with ICA on microbial diversity of colonic digesta in weaned piglets. (A) Sobs index of OTU level. (B) Shannon index of OTU level. (C) Ace index of OTU level. (D) Chao index of OTU level. (E) Venn diagrams for bacterial OTU. (F) PCoA based on the total OTUs. *, $P < 0.05$; **, $P < 0.01$.



Supplemental figure 3: Effect of diet supplement with ICA on microbial composition of colonic digesta in weaned piglets. (A) Percent of community abundance on phylum level. (B) Percent of community abundance on genus level.



Supplemental figure 4: LEfSe analysis of the colonic digesta microbial community. (A) Cladogram of LEfSe. (B) Histograms of a linear discriminant analysis (LDA) score.



Supplemental figure 5: Effect of diet supplement with ICA on intestinal fatty acid binding protein (I-FABP) in weaned piglets. Data were shown as mean ± SEM (n = 6). *, $P < 0.05$.